

Work Order ID 165435

165435

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Wednesday, August 23, 2017 10:24:05 AM

Item ID: D3624-2 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bubble Window

Start Date: 8/23/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 9/5/2017 Req'd Qty: 1.00 ***1*** Customer:

Reference: **DAS**

Approvals: Process Plan: **13** Date: **AUG 22 2017** Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3624	Rev D								DAS
110		0.00							13
110	THERMOFORMING MACHINE								9-89
Purchasing	Memo	0.00							
Purchasing	ISSUE P/O: 37528								
	SUPPLIER: PLASTECH								
	MANUFACTURE D3624-2 AS PER DWG								
	C OF C IS REQUIRED								
140	Receive & Inspect for Damage & Mat'l Certs	0.00							
140	HAND FINISHING THERMOFORMING								
Packaging	Memo	0.00							
Packaging									

1 X SP 17-9-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : _____			

Work Order ID 165435***165435***

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Wednesday, August 23, 2017 10:24:05 AM

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Required Date: 9/5/2017 Req'd Qty: 1.00 ***1*** Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150

QC6- All purchased or subcontracted products

0.00

150

QC

Memo

0.00

Quality Control

0 17-09-21 PD

170

Identify as per dwg & Stock Location: _____ 0.00

170

Packaging

Memo

0.00

Packaging

DAS
27
9-89

SEP 21 2017

180

QC21- Final Inspection - Work Order Release 0.00

180

QC

Memo

0.00

Quality Control

17/9/22 [Signature][Signature]

SEP 21 2017

Picklist Print

Wednesday, August 23, 2017 10:24:04 AM

Page 1

Work Order ID: 165435

165435

Parent Item: D3624-2

D3624-2

Parent Item Name: Bubble Window

Start Date: 8/23/2017

Required Date: 9/5/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A Thermoform in house 6/27/2007 DL
IPP B. Revised due to corrupt operating Program. 7/23/2007 DL
IPP C. Dwg. Rev. change 7/30/2007
IPP D. Dwg. Rev. Updated 4/25/2008 verified by:DD IPP Rev.E
17.06.20 Now outside process DP Verify DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3624-2P		Purchased		No			Each	0.0000		1			
D3624-2P									**				
Bubble Window													

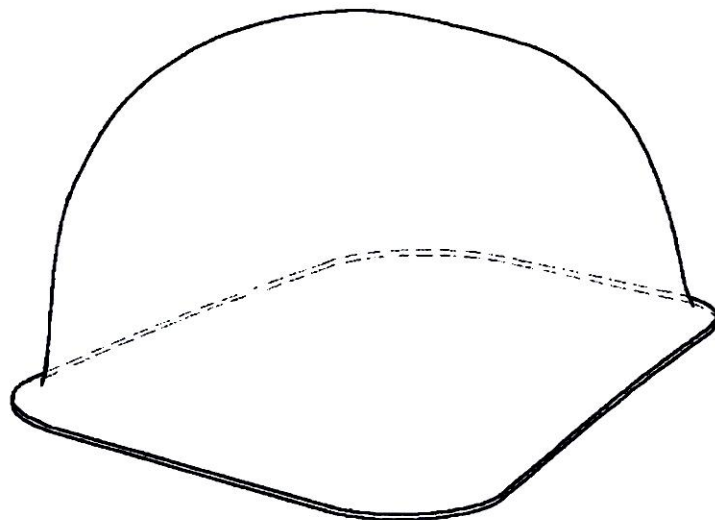
1x SP17-9-21.

1105768

MACRLICS. 000
177

M135559

11-2S  SEP 21 2017



D3624-2 BUBBLE WINDOW

NOTES:

- 1) MATERIAL: PLEXIGLAS G CLEAR CAST ACRYLIC SHEET PER LP-391 TYPE 1 GRADE C
OR POLYCAST II CLEAR ACRYLIC SHEET PER MIL-P-5425
0.177 TO 0.188 THICK (STOCK, REF DART SPEC M-ACRYLIC-S)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 TO 0.020 MAX
- 6) IDENTIFICATION: ENGRAVE P/N & B/N ON FLANGE WITHIN 0.25" OF BUBBLE. USE 0.125" LETTERS TO MAX DEPTH OF 0.005".
- 7) WEIGHT: 2.95 lbs
- 8) FORM PER DT8953 AND QSI 022
FORMING PROCESS: (a) DRAPE OVER DT8953 MOLD
(b) HEAT TO 290°F
(c) VACUUM FORM TO SPECIFIED HEIGHT
(d) LET COOL TO AT LEAST 100°F BEFORE HANDLING
(e) TRIM FLANGE USING DT8954

**DAS
13
9-89**

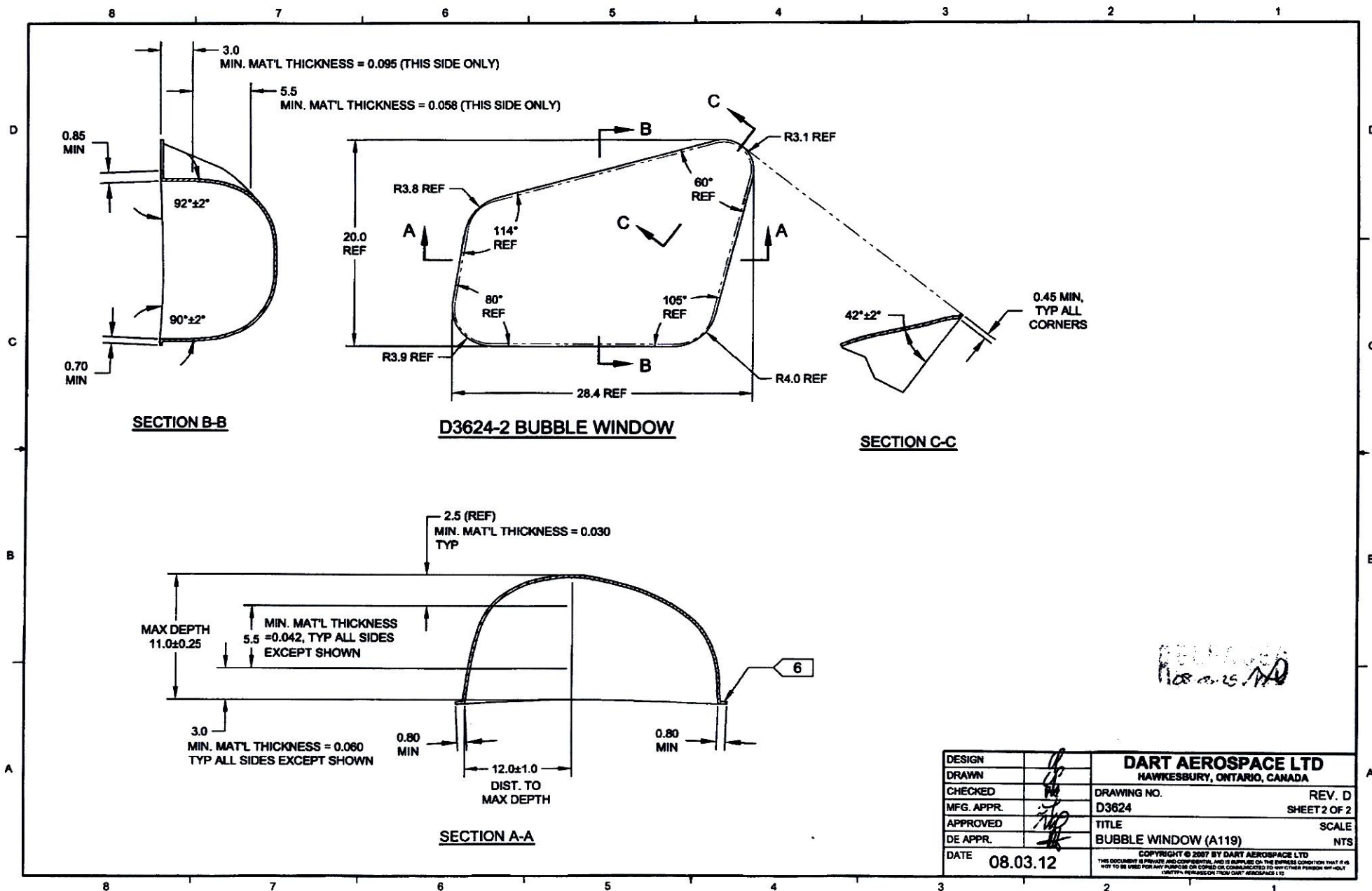
AUG 22 2017

W10.165435

RELEASED
10-23-2014

D	REDRAW, REFORMAT, RMV SHAPE TOOL, ADD SEC B-B (2C8) & C-C (2C3), ADD FLANGE & WALL & WALL ANGLE DIMS, UPDATE MATL SPEC (1B8)	CP	08.03.12
C	ADD TOOL TO CONTROL BUBBLE SHAPE	CP	07.08.27
B	11.0" DEPTH WAS 12.0"	CP	07.05.24
A	NEW ISSUE	CP	07.08.27
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>		
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	08.03.12		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3624	REV. D SHEET 1 OF 2
TITLE BUBBLE WINDOW (A119)	SCALE NTS
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37528**

Purchase Order Date 8/23/2017

PO Print Date 8/23/2017

Page Number 1 of 2

Order From : VC-PLT01
PLAS-TECH
115 APPLEWOOD CRESCENT
CONCORD, ONTARIO L4K 5C1

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
AUG 23 2017

Contact Name
Vendor Phone 416-736-0004

Ship To Contact
Ship To Phone
Ship Via:
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D3624-2P MANUFACTURE AS PER DWG D3624-2 REV. D B165435	Bubble Window	9/12/2017 Yes 9/12/2017		1.00 Each	\$300.00	\$300.00
Line Total:							\$300.00
2	71401-45	PROCUREMENT QUALITY CLAUSES	9/12/2017 No 9/12/2017		1.00	\$0.00	\$0.00
Procurement Quality Clauses							
A005 right of entry							
A008 FAI documentation sent to Dart Aerospace							
A012 chemical and physical test report							
A016 personnel qualification							
A017 raw material identification (as applicable)							
A026 certification of material conformance							
A041 quality management system							
A042 dart notification by supplier							
A043 retention of quality document							

Note:

8/23/2017

Packing Slip



115 Applewood Crescent
Concord, ON, L4K 5C1
PLASTECHONLINE.COM
P- 416 736 0004
F- 416 736 0010

Shipment Number: 24381
Shipment Date: 09/19/2017
BOL Number:
Customer Key: C1887
Salesperson: MIKE AUBE
Page Number: 1 of 1

B DART AEROSPACE LTD.
I 1270 ABERDEEN STREET
L HAWKESBURY ON K6A 1K7
L CA
T Attn: ROBERT ABOUD
O Buyer Contact: ROBERT ABOUD

S DART AEROSPACE
H 1270 ABERDEEN STREET
I HAWKESBURY ON K6A 1K7
P CA
T Attn: ROBERT ABOUD
O

Purchase Order
37528
Carrier Account #
CU103666

Sales Order
SO-019808

Incoterms
EX WORKS
Ship Via
FREIGHTCOM INC. -

Payment Method
PPD/CHG
Tracking Number

Item Number - Revision	Description
D3624-2 - Rev.: D	BUBBLE WINDOW (A119)

Quantity	UOM
1	EA

AS PER DWG D3624
HS Code: 3920.51.1000 - OTHER Country of Origin : CA

SP 17-9-21

Number of Containers

Gross Weight

Shipped By

Certificate Of Conformance

COPY PLAS-TECH
Think Plastics™

Customer: DART AEROSPACE LTD P.O. # 37528 SO # 019808-001

Part #	D-3624-2	Qty.	1	Batch #	-001
Description	BUBBLE WINDOW (A119)	Material usage	OFF-CUT	Lot#	M105766
Part #		Qty.		Batch #	
Description		Material usage		Lot#	
Part #		Qty.		Batch #	
Description		Material usage		Lot#	
Part #		Qty.		Batch #	
Description		Material usage		Lot#	
Part #		Qty.		Batch #	
Description		Material usage		Lot#	
Part #		Qty.		Batch #	
Description		Material usage		Lot#	
Part #		Qty.		Batch #	
Description		Material usage		Lot#	
Part #		Qty.		Batch #	
Description		Material usage		Lot#	

Note: All parts are not identified as meeting QSI044.

By: AB
(Approved QA Signatory)

Date: SEPT. 12, 2017

COFC # 012

Page: 1 of 1

Plas-Tech Inc. 115 Applewood Cres. Concord, Ontario L4K 5C1 Tel: (416) 736-0004 Fax: (416) 736-0010

Email: info@plasteconline.com, Web: www.plasteconline.com

DART AEROSPACE LTD		Work Order:	
Description: Bubble Window (A119)		Part Number:	D3624-2
Inspection Dwg: D3624	Rev: D	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Bubble Depth within tolerance	✓			
Shape Definition	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

DAS

Measured by: 07
9-89

Date: 17/09/21

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
11.0	+/-0.25	10.750"	✓			
3.0	0.095 Min	0.095"	✓			
8.5	0.058 Min	0.062"	✓			
3.0	0.060 Min	0.098"	✓			
8.5	0.042 Min	0.044"	✓			
2.5	0.030 Min	0.044"	✓			
92°	+/-0.2° Min	93°	✓			
90°	+/-0.2° Min	90°	✓			
0.85	Min	0.86"	✓			
0.70	Min	0.78"	✓			

DAS

Measured by: 07
9-89

Date: 17/09/21

Audited by: PD

Date: 17-09-21

Prototype Approval:

Date:

Rev	Date	Change	Revised by	Approved
A	08.11.28	New Issue	KJ/DL	